

**Remarks**

Claim 1 has been cancelled without prejudice or disclaimer and claims 5-9, 12, 16-17 and 19-20 have been amended to reflect the cancellation of claim 1. Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned Version with markings to show changes made.

**Restriction Requirement Under 35 U.S.C. 121**

In response to the Restriction Requirement, **Applicants hereby elect to prosecute the claims of Group I (claims 1-6 and 21) with traverse.**

With regard to the traversal, Applicants note that the office action considers the inventions of Groups I, VI and VIII to lack the same or corresponding technical features because of claim 16 is drawn to first method of using a first product while claims 19 and 20 are drawn to a second method of using a first product. Applicants respectfully submit that the inventions of Groups I and VI have the same or corresponding technical features. PCT Rule 13.2 defines the expression "special technical feature" to mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art. The special technical feature of the invention of Group I is the protein which induces the production of a broadly cross-reactive neutralizing anti-serum against multiple strains of HIV-1. In the invention of Group VI, the presence of this protein is necessary to utilize the claimed method of generating antibodies while in the invention of Group VIII, the presence of this protein is necessary to detect the presence of HIV-1 antibodies. Further, it is pointed out that 37 C.F.R. 1.475(b)(2) states:

"An international or a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of the following combinations of categories: ... (2) A product and process of use of said product; or ..."

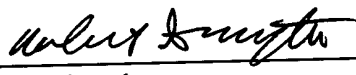
Group I is drawn to a HIV envelope protein which is a product and Group VI is drawn to a method of using the protein to generate antibodies. Furthermore, the HIV envelope protein of Group I is required to practice the claimed method in Group VI. Thus, the inventions of Groups I and VI are linked to form a single general inventive concept.

**Conclusion**

**Except** for issues payable under 37 C.F.R. 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account 50-0310. This paragraph is intended to be a **constructive petition for extension of time** in accordance with 37 C.F.R. 1.136(a)(3).

Dated: **March 29, 2002**  
Morgan, Lewis & Bockius LLP  
Customer No. **09629**  
1111 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004  
202-739-3000

Respectfully submitted  
**Morgan, Lewis & Bockius LLP**

  
\_\_\_\_\_  
Robert Smyth  
Registration No. 50,801

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**Claim 5 has been amended as follows:**

5. (Once Amended) A vaccine composition comprising an isolated HIV-1 envelope protein or fragment thereof of any one of claims [~~1-4~~] 2-4 and a pharmaceutically acceptable carrier.

**Claim 6 has been amended as follows:**

6. (Once Amended) An immunogenic composition comprising an isolated HIV-1 envelope protein or fragment thereof of any one of claims [~~1-4~~] 2-4 and a pharmaceutically acceptable carrier.

**Claim 7 has been amended as follows:**

7. (Once Amended) An isolated nucleic acid molecule encoding the HIV-1 envelope protein or fragment thereof of any of claims [~~1-4~~] 2-4.

**Claim 8 has been amended as follows:**

8. (Once Amended) A fusion protein comprising all or a portion of a microbiological antigen into which any one of the proteins of claims [~~1-4~~] 2-4 has been inserted.

**Claim 9 has been amended as follows:**

9. (Once Amended) A recombinant delivery vector encoding a fusion protein comprising all or a portion of a microbiological antigen into which any one of the proteins of claims [~~1-4~~] 2-4 has been inserted.

**Claim 12 has been amended as follows:**

12. (Once Amended) A recombinant delivery vector encoding an attenuated virus further comprising a nucleotide sequence encoding one or more of the proteins of any one of claims [~~1-4~~] 2-4.

**Claim 16 has been amended as follows:**

16. (Once Amended) A method of generating antibodies in a mammal comprising administering one or more of the proteins or fragments thereof of any one of claims [~~1-4~~] 2-4, in an amount sufficient to induce the production of the antibodies.

**Claim 17 has been amended as follows:**

17. (Once Amended) A method of generating antibodies in a mammal comprising administering a DNA or mRNA sequence encoding any one of the proteins or fragments thereof of claims [~~1-4~~] 2-4, in an amount sufficient to induce the production of the antibodies.

**Claim 19 has been amended as follows:**

19. (Once Amended) A diagnostic reagent comprising one or more of the isolated HIV-1 envelope proteins or fragments thereof of any one of claims [~~1-4~~] 2-4.

**Claim 20 has been amended as follows:**

20. (Once Amended) A method of detecting HIV-1 antibodies in a sample comprising the step of determining whether antibodies in the sample bind to one or more of the HIV-1 envelope proteins or fragments thereof of claims [~~1-4~~] 2-4.